Commonwealth of Virginia

Department of Environmental Quality

Solid Waste Managed in Virginia During Calendar Year 2003



June 2004

Table of Contents

Solid Waste Managed in Virginia During Calendar Year 2003

EXE	CUTIVE SUMMARY	1
I.	Introduction	1
Π.	Reporting Procedures	1
III.	Receipt of Assessment Reports	2
IV.	Discussion of Reported Waste Management Activities	
V.	Capacity Information	4
VI.	Reports of Economic Benefits	
VII.	Waste from Hurricane Isabel	5
A		
В	. Information on Waste Received at Sites Issued Emergency Permits from the Department	5
C		
Tabl	es	
Tab!	le 1 - Solid Waste Managed in Virginia - 2003 (in Tons)	7
Tab	le 2 - Jurisdiction of Origin of Waste Received - 2003 (in Tons)	8
Tab	le 3 - Summary of Available Capacity in Permitted Disposal Facilities – 2003 (in Tons)	9
Figu	res	
Figu	rre 1 - Methods of Solid Waste Management – 2003 (in Tons)	10
Figu	re 2 - Composition of the Solid Waste Stream – 2003 (in Tons)	11
	re 3 - Waste Received from Out-of-State Jurisdictions - 2003 (in Tons)	
Figu	re 4 - Quantity of Solid Waste Received in Virginia - 2003 (in Tons)	13
Figu	re 5 - Comparison of Total Solid Waste Received From 1998 Through 2003	14
Figu	re 6 - Comparison of Municipal Solid Waste Received From 1998 Through 2003	15
Atta	chments	
Atta	chment 1 - Virginia Code § 10.1-1413.1 - Waste information and assessment program	16
	chment 2 - 9 Virginia Administrative Code 20-80-115 - Solid waste information and assessment program	
	chment 3 - 9 Virginia Administrative Code 20-130-165 - Waste information and assessment program	
Atta	chment 4 - Reporting Table	19
	chment 5 - Instructions for Completing Form DEQ 50-25 Solid Waste Information and Assessment Program Reporting Form.	
	chment 6 - List of Facilities Reporting - 2003	
Atta	chment 7 - Capacity/Disposal Rate Detail for Virginia Landfills - 2003 (in Tons)	29

Solid Waste Managed in Virginia During Calendar Year 2003

EXECUTIVE SUMMARY

Section 10.1-1413.1 of the Code of Virginia requires the Department of Environmental Quality (Department) to prepare a report by June 30 of each year describing the amount of solid waste disposed of in the Commonwealth during the preceding calendar year. Facilities that have solid waste management permits are required to provide the Department with information to prepare this report. As of May 21, 2004, two hundred and five (205) permitted facilities (excluding facilities with emergency permits (EMGs) to handle waste from Hurricane Isabel) provided information on their activities for calendar year 2003 for this report. As of that same date, ninety-seven (97) EMG facilities that managed only Hurricane Isabel waste provided information on their 2003 activities.

Based on the facilities' reports (excluding Hurricane Isabel facilities), a total of 25,169,722 tons of solid waste was received at Virginia's permitted solid waste management facilities during calendar year 2003. Of this total, 18,575,979 tons originated in the Commonwealth, and 6,593,743 tons originated from other jurisdictions.

Municipal solid waste (MSW) constituted 16,680,070 tons of the total amount of solid waste received during calendar year 2003. Of the total MSW received, 11,190,900 tons originated in the Commonwealth, and 5,489,170 tons originated from other jurisdictions.

Four jurisdictions accounted for 92.7% of all waste received from out-of-state sources: Maryland (36.9%); New York (28.2%); Washington, D.C. (20.1%); and North Carolina (7.6%).

During calendar year 2003, the total solid waste and MSW received from out-of-state sources increased by 21.6% and 21.7%, respectively, over 2002 amounts. For Virginia sources during the same period, the total solid waste received and MSW received increased by 6.2% and 8.2%, respectively, over 2002 amounts.

Of all solid waste managed in Virginia during the year (except for Hurricane Isabel waste and waste that was only sent off site), 82.6% - 16,669,868 tons - was landfilled, 10.4 % was incinerated, and the rest was managed by other means. Of all solid waste received at Virginia facilities during the year, 66.3% was MSW, 15.9% was construction/demolition/debris (CDD) waste, and the remainder was other types of waste.

Permitted solid waste management facilities reported that they recycled 1% of the waste that they managed (except for Hurricane Isabel waste and waste that was only sent off site). Most recycling, however, occurs at facilities other than permitted waste management facilities. Local governments provide more complete information on the recycling of waste generated in Virginia. Based on the local government recycling reports, the statewide average recycling

rate for calendar year 2002 was 36.75%. See http://www.deq.virginia.gov/recycle/pdf/rrr02rpt%20.pdf. A report on the statewide recycling rate for calendar year 2003 will be issued later this year.

For the third year, permitted facilities were required to report on their available capacity and the expected life of the facilities based on current disposal rates. This information shows that at current rates the remaining available landfill capacity is as follows: MSW - 18.3 years; CDD - 7.4 years; non-captive industrial -45.0 years; and total -17.2 years. These projections do not account for population increases, changes in waste generation or disposal rates, or the closing of older MSW disposal units pursuant to statute.

The statute provides that, at the option of the facility owner, the data collected may include an accounting of the facility's economic benefits to the locality where the facility is located. No facilities provided such information for calendar year 2003.

Information on the clean up of waste from Hurricane Isabel is treated separately in this report. The Department issued 128 emergency permits (EMGs) to sites handling Hurricane Isabel debris. Hurricane Isabel waste placed a large additional load on waste management resources during 2003. Sites with Department emergency permits alone reported receiving an additional 3,356,324 tons of waste, all but about 75,805 tons of that being woody debris. Other permitted sites handled additional waste from Hurricane Isabel. Although much of this waste has been managed, some remains at EMG sites.

Solid Waste Managed in Virginia During Calendar Year 2003

I. Introduction

This report has been prepared in accordance with Virginia Code § 10.1-1413.1, which requires the Department to prepare a report by June 30 of each year describing the amount of solid waste disposed of in the Commonwealth during the preceding calendar year (see Attachment 1). All permitted facilities (except for captive waste management facilities) that treat, store, or dispose of solid waste are required to provide the Department with information in their possession as is reasonably necessary for the Department to prepare this report. The statutory reporting requirements have been clarified and supplemented by regulation in 9 Virginia Administrative Code (VAC) 20-80-115 and 20-130-165 (Attachments 2 and 3).

II. Reporting Procedures

For each category of solid waste, permitted solid waste facilities in Virginia were asked to report the amount of waste that they received, the method by which the waste was managed, and the jurisdiction where the waste originated, if known. A copy of the reporting table and instructions for furnishing information to the Department are provided as Attachments 4 and 5, respectively.

The facilities identified amounts of solid waste by each of the following categories:

- municipal solid waste (MSW);
- construction and demolition debris (CDD);
- industrial waste;
- regulated medical waste (RMW);
- vegetative and yard waste (VW/YW);
- incineration ash;
- sludge other than is land applied in accordance with Virginia Code § 32.1-164.5;
- tires:
- white goods (e.g., refrigerators, washing machines);
- friable asbestos:
- petroleum-contaminated soil (PCS); and
- other waste.

The facilities also reported on each of the following methods of waste management:

- recycling;
- composting;
- landfilling;

- incineration;
- sending off site for further management;
- storing on site; and
- other.

This report does not wholly represent Virginia's waste management activities, because the statute exempts all captive waste management facilities from the reporting requirements. A captive facility is one that is located on property owned or controlled by the generator of the waste. Most captive waste management facilities in Virginia are industrial landfills. As a result, the reported amounts of industrial waste and sludge represent only the portion that is managed in off-site facilities. Also, this report does not reflect tires managed under the Waste Tire Trust Fund at facilities that do not require a permit. Waste resulting from Hurricane Isabel that was managed at facilities with emergency permits (EMGs) is treated separately in this report, and is not included in Part IV of this report, nor in the tables, figures, and attachments, unless otherwise indicated.

Permitted solid waste management facilities reported that they recycled 1.0% of the waste that they managed (excluding for Hurricane Isabel waste and waste that was only sent off site). Most recycling, however, occurs at facilities other than permitted waste management facilities. Local governments provide more complete information on the recycling of waste generated in Virginia. Based on the local government recycling reports, the statewide average recycling rate for calendar year 2002 was 36.75%. See http://www.deq.virginia.gov/recycle/pdf/rrr02rpt%20.pdf. A report on the statewide recycling rate for calendar year 2003 will be issued later this year.

III. Receipt of Assessment Reports

By regulation, facilities must submit their reporting tables by March 31 of each year. Facilities are required to submit a separate reporting table for each jurisdiction from which they received waste. Information from reporting tables received on or before May 21, 2004, has been included in this report. Two hundred and five (205) facilities (excluding facilities that only handled Hurricane Isabel waste) reported on their activities for calendar year 2003. Last year, one hundred ninety-four (194) facilities reported on their activities for calendar year 2002. A list of the facilities reporting this year (excluding facilities that only handled Hurricane Isabel waste) is provided as Attachment 6. These facilities submitted a total of 370 separate reporting tables, representing waste received from 31 states (including Virginia); Washington, D.C.; Canada (including the Province of Ontario); and Puerto Rico.

¹ Throughout this report, percentages have been rounded to the nearest 0.1%. In the text of the report and in the figures, tonnages have been rounded to the nearest ton.

² Local governments (or their designated solid waste management planning regions) are required to file annual reports on recycling rates pursuant to the Regulations for Solid Waste Management Planning, 9 VAC 20-130.

IV. Discussion of Reported Waste Management Activities

Table 1 summarizes the quantities of waste that facilities received and managed during calendar year 2003, by waste type and waste management method.³ As shown in the table, 25,169,722 tons of solid waste was received at Virginia's permitted solid waste management facilities during calendar year 2003. Municipal solid waste (MSW) constituted 16,680,070 tons of the total amount of solid waste received.⁴

The column of Table 1 entitled "Landfilled" indicates the quantity of solid waste disposed of at permitted solid waste landfills in the Commonwealth during calendar year 2003. The amount of solid waste landfilled during the year was 16,669,868 tons. This was an increase of 6.2% from the 15,693,142 tons that was landfilled in calendar year 2002. The other columns of Table 1 indicate the quantity of waste managed by other methods. The column entitled "Sent Off Site" indicates the quantity of waste that was sent off site in calendar year 2003 to be managed elsewhere (5,387,093 tons). If this waste was sent off site to another permitted Virginia facility, it would also be included in the receiving facility's reporting tables (i.e., if the waste is received at two, separate Virginia-permitted facilities, it may be counted twice as received waste).

Figure 1 shows the percentage of each method of solid waste management, excluding waste that was only sent off site.⁵ The majority of solid waste managed in the Commonwealth during the year, excluding the amount sent off site, was landfilled (82.6% of all waste managed) or incinerated (10.4%). Lesser amounts were reported as managed by other methods (3.5%), composted (1.6%), recycled (1.0%), or stored on site (0.9%).

Figure 2 shows the composition of the solid waste stream. Of all solid waste received at Virginia facilities in calendar year 2003, 66.3% was MSW, 15.9% was CDD waste, and the remainder was other types of waste. These included VW/YW (3.9%), industrial waste (3.6%), incineration ash (3.6%), "other waste" (3.2%), and sludge (1.9%).

Table 2 shows the quantities of solid wastes imported from outside Virginia. Four jurisdictions account for 92.7% of all waste sent from out-of-state sources to Virginia: Maryland (36.9%); New York (28.2%); Washington, D.C. (20.1%); and North Carolina (7.6%). Figure 3 illustrates the total quantity of waste received from individual jurisdictions.

Figure 4 compares the amount of waste received at facilities from out-of-state jurisdictions to the amount received from Virginia during calendar year 2003. Of the total amount of solid

_

³ Data in the table, figures, and attachments of this report do not include waste managed at emergency permit (EMG) facilities that handled only Hurricane Isabel waste, unless otherwise indicated.

⁴ When referring to information from Table 1, "waste received" refers to information from the first column, and "waste managed" refers to information from the remaining columns. The amount of waste "received" for each type of waste may not match the sum of the reported amounts identified for each method of waste management. This reflects information as submitted by facilities in the reporting tables. In particular, incinerators may properly include the ash that they generate as waste that is "sent off site," and not include it as waste that is "received" at that facility.

⁵ The basis for determining these percentages is the sum for all methods of waste management (recycled, composted, landfilled, etc.) in Table 1, except for waste sent off site. Therefore, the basis for these percentages is 20,186,098 tons.

waste received (25,169,722 tons), 18,575,979 tons originated in the Commonwealth, and 6,593,743 tons originated from other jurisdictions. Of the total MSW received (16,680,070 tons), 11,190,900 tons originated in the Commonwealth, and 5,489,170 tons originated from other jurisdictions.

Figure 5 shows a comparison of total solid waste received in 1998 through 2003 for both Virginia and out-of-state sources. Figure 6 shows the same comparison for MSW. During calendar year 2003, the total solid waste received from out-of-state sources increased by 21.6% and MSW increased by 21.7% over 2002. For Virginia sources during the same period, the total solid waste and MSW increased by 6.2% and 8.2%, respectively.

This report does not reflect the amount of solid waste exported from Virginia to other states. The Department regulates only the treatment, storage, and disposal of solid waste within the Commonwealth. Virginia facilities, waste generators, and localities are not required to submit information on the amount of solid waste exported to other states.

V. Capacity Information

For the third year, landfills that treat, store, or dispose of solid waste were required to report on their available capacity and the expected life of the facilities at the current disposal rates. This information is summarized in Table 3 and detailed in Attachment 7. MSW landfills reported a total available capacity of 253,876,486 tons and a current disposal rate of 13,898,282 tons per year. Thus, at the current disposal rate, there would be 18.3 years of available MSW landfill capacity in the Commonwealth. However, this calculation does not account for population changes, changes in waste generation or disposal rates, or the closing of older MSW disposal units under Va. Code § 10.1-1413.2. Nor does it include facilities for which permits may have been issued, but that have not yet been built and are not accepting waste. Last year, it was reported that there were 19.7 years of remaining MSW disposal capacity.

CDD landfills reported a total available capacity of 18,054,541 tons and a current disposal rate of 2,455,035 tons per year. At the current disposal rate, there would be 7.4 years of available CDD landfill capacity in the Commonwealth. Last year, it was reported that there were 7.7 years of remaining CDD disposal capacity. For non-captive industrial landfills, there are 14,254,442 tons of available capacity and a current disposal rate of 316,550 tons per year (45.0 years). Last year, it was reported that there were 24.3 years remaining capacity for non-captive industrial facilities.

In total, there are 286,185,469 tons of available capacity and a current disposal rate of 16,669,868 tons per year (17.2 years). Last year, it was reported that there were 17.7 years remaining total capacity.

VI. Reports of Economic Benefits

The statute provides that, at the option of the facility owner, the data collected may include an accounting of the facility's economic benefits to the locality where the facility is located.

This may include the value of disposal and recycling facilities provided to the locality at no cost or reduced cost, direct employment associated with the facility, and other economic benefits resulting from the facility during the preceding calendar year. No facilities provided such information for calendar year 2003.

VII. Waste from Hurricane Isabel

A. The Event

On September 18, 2003, Hurricane Isabel struck Virginia after making landfall along the Outer Banks of North Carolina. The storm brought initial winds to the Commonwealth near 100 mph and tropical storm force winds for 29 hours. The hurricane produced a storm surge of five to eight feet along the coast and in the Chesapeake Bay, with rainfall totals between two to eleven inches along its track. Damages due to wind, rain, and storm surge resulted in flooding, electrical outages, debris, transportation interruption, and damaged homes and businesses. Anticipating the arrival of the hurricane, Governor Mark R. Warner declared a State of Emergency in the Commonwealth on September 15, 2003. Governor Warner requested, and a Major Presidential Disaster Declaration (FEMA-1491-DR-VA) was issued, on September 18, 2003.

Because Hurricane Isabel was a singular event for the Commonwealth in 2003, the waste it caused is treated separately in this report to the extent possible. The storm placed a significant, additional burden on waste management resources within the Commonwealth. The "Hurricane Isabel Assessment Team" presented *An Assessment: Virginia's Response to Hurricane Isabel* to Governor Warner in December 2003.

The overwhelming waste produced by Hurricane Isabel was woody debris. Lesser amounts of other wastes resulting from the storm, such as construction or demolition waste and white goods, may have initially gone to facilities with emergency permits, but were handled through the normal waste management system. The information presented here regarding the management of debris generated as a result of the hurricane is derived from DEQ solid waste information and assessment reports.

B. Information on Waste Received at Sites Issued Emergency Permits from the Department

Prior to the storm's landfall, in cooperation with local governments and regional authorities, the Department began issuing emergency permits for the management of woody waste. Many more emergency permits were issued after the event. In total, the Department issued 128 emergency permits (EMGs) to sites handling Hurricane Isabel debris. The Department received waste information assessment reports on ninety-seven (97) EMG sites that handled only Hurricane Isabel Waste. According to the reporting tables, these sites handled:

- 75,458 tons of CDD;
- 340 tons of white goods;
- 8 tons of ash from the burning of wood wastes; and
- 3,280,518 tons of woody waste or woody waste combined with ash or dirt.

Some waste remains at the emergency permitted sites. The Department will continue to monitor facilities that have Hurricane Isabel debris remaining on-site in order to ensure that there are no environmental impacts resulting from the long-term management of this waste.

C. Increases Seen Over Vegetative Waste Managed in 2002 at Other Permitted Facilities

The amount of vegetative waste managed by permitted solid waste management facilities, other than those operating under EMG, increased significantly over the tonnage reported for calendar year 2002. The amount of vegetative waste managed at such facilities increased by 54.7% from 641,273 tons in 2002 to 991,885 tons in 2003 (56,033 tons landfilled in 2002 versus 61,767 tons landfilled in 2003). Much of this additional waste likely resulted from the debris wastes generated by the hurricane. The volume of hurricane waste managed at permitted solid waste management facilities (other than those operating under an EMG), is included in Part IV of this report.

Table 1 - Solid Waste Managed in Virginia - 2003 (in Tons)

Waste Type/Method	Received ⁶	Recycled ⁷	Composted	Landfilled	Incinerated	Sent off Site	Stored on Site	Other ⁸
Municipal Solid Waste	16,680,070.07	5,143.50	30.00	10,670,710.76	2,073,407.76	3,928,473.55	8,977.00	263.50
Construction/Demolition/Debris	4,005,056.40	24,175.05	337.00	3,465,547.65	1,200.00	437,071.09	6,106.40	70,619.20
Industrial Waste	918,397.43	17,537.00	0.00	859,162.48	13.00	41,265.95	419.00	0.00
Regulated Medical Waste	17,483.61	0.00	0.00	0.00	6,900.00	3,634.63	0.00	13,853.66
Vegetative/Yard Waste	991,885.22	23,555.76	309,989.74	61,767.13	282.11	383,114.89	137,206.56	90,051.03
Incineration Ash	916,903.29	5,185.70	0.00	804,161.26	0.00	372,295.21	3,864.00	101,888.55
Sludge	476,616.12	5,513.13	7,793.00	457,231.82	218.92	3,098.16	2,761.09	0.00
Tires	123,472.52	17,565.82	0.00	1,512.05	0.00	74,739.38	6,681.40	25,999.88
White Goods	48,076.57	180.00	0.00	0.00	0.00	48,268.51	16.00	0.00
Friable Asbestos	6,866.84	0.00	0.00	6,826.09	0.00	40.75	0.00	0.00
Petroleum Contaminated Soil	174,298.03	80,991.28	0.00	30,277.48	0.00	1,041.26	5,946.25	56,041.76
Other Waste	810,595.87	24,308.25	0.00	312,671.40	9,056.63	94,049.53	16,869.19	355,282.04
Totals	25,169,721.98	204,155.49	318,149.74	16,669,868.11	2,091,078.42	5,387,092.93	188,846.89	713,999.62

_

⁶ The amount of waste "Received" may not precisely match the sum of the reported amounts for each method of management. This difference reflects information submitted in the reporting tables. In particular, incineration ash generated by an energy recovery facility or incinerator may be listed as "sent off site," even though it was not "received" as ash at that facility.

⁷ The majority of recycling takes place at facilities that do not require a permit from the Department and were not required to submit data for this report. Therefore, the amounts shown in this column represent a substantial underestimate of the true recycling rate in the Commonwealth. Based on the local government recycling reports, the statewide average recycling rate for calendar year 2002 was 36.75%. See http://www.deq.virginia.gov/recycle/pdf/rrr02rpt%20.pdf. A report on the statewide recycling rate for calendar year 2003 will be issued later this year.

^{8 &}quot;Other" methods of management may include steam sterilization of medical waste, approved use of shredded tires at permitted facilities, and thermal treatment of PCS, among others.

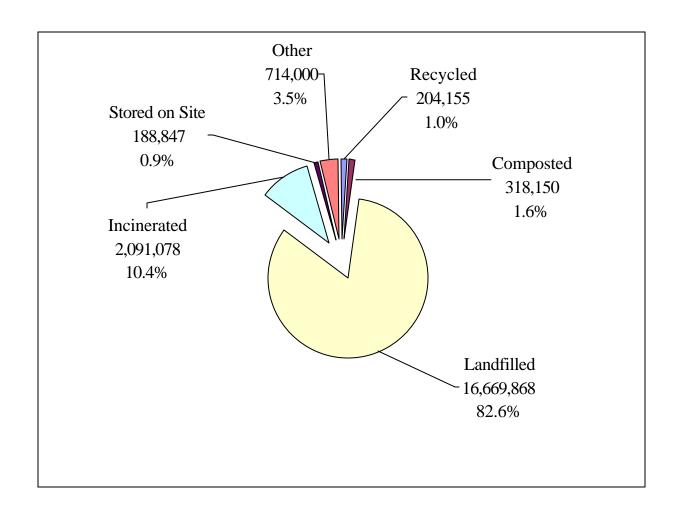
Table 2 - Jurisdiction of Origin of Waste Received - 2003 (in Tons)

State/Possession	MSW	CDD	Industrial	RMW	VW/YW	Incin. Ash	Sludge	Tires	White Goods	Fri. Asbestos	PCS	Other	Total Received
Alabama			26.04										26.04
Arizona			2.00										2.00
California			0.90										0.90
Canada	196.90											16,419.24	16,616.14
Connecticut			457.33								23.53	21.97	502.83
Delaware	65,626.83	6.28	17.92	0.31			295.15					82.07	66,028.57
District of Columbia	1,175,881.29	122,043.60	200.44		253.45	0.00	12,318.79	1,488.35	35.37		22,402.91	5,594.49	1,340,218.69
Florida	7.52		118.36									337.85	463.73
Georgia	466.13		51.50								3.00	254.09	774.72
Illinois	544.40		6.96										551.36
Indiana	691.22											11.60	702.82
Kansas			0.20										0.20
Kentucky	486.00		10.98										496.98
Maryland	1,808,446.05	283,452.60	25,886.61	1,610.90	1,051.90	190,048.75	130,799.93	8,793.39	50.47		3,390.52	10,701.67	2,464,232.78
Massachusetts	12,186.64		256.28								64.86	186.49	12,694.27
Michigan	28.31												28.31
Mississippi	65.21		91.50									402.40	559.11
Missouri												50.99	50.99
Nevada	89.00		4.40										93.40
New Hampshire			79.51									559.77	639.28
New Jersey	84,217.90	11,718.71	4,493.17	853.00			42,750.74				296.88	2,466.51	146,796.91
New York	1,765,271.13	11,112.87	53,368.51				51,713.20	210.59			46.84	203.36	1,881,926.50
North Carolina	470,074.30	477.93	8,535.38	525.90	15.00		22,307.00			5.22	3,355.29	297.42	505,593.44
Ohio	816.89		0.93									4.19	822.01
Oklahoma												0.10	0.10
Ontario (Canada)												17.84	17.84
Pennsylvania	28,602.99	35,620.20	3,788.19	764.00							518.98	646.57	69,940.93
Puerto Rico												48.13	48.13
Rhode Island			6.05										6.05
South Carolina	1,074.00		7.64								3,694.01	170.32	4,945.97
Tennessee	28,836.83	1,771.46	70.91		613.43			547.51	24.16			768.90	32,633.20
Texas		·	6.47									73.70	80.17
West Virginia	45,560.92		20.09	67.70				134.54			64.50	379.65	46,227.40
Wisconsin			21.19										21.19
Total for other states	5,489,170.47	466,203.65	97,529.45	3,821.81	1,933.78	190,048.75	260,184.81	11,174.38	110.00	5.22	33,861.32	39,699.32	6,593,742.96
Total for Virginia	11,190,899.60	3,538,852.75	820,867.98	13,661.80	989,951.44	726,854.54	216,431.31	112,298.14	47,966.57	6,861.62	140,436.71	770,896.55	18,575,979.02
Total for all states	16,680,070.07	4,005,056.40	918,397.43	17,483.61	991,885.22	916,903.29	476,616.12	123,472.52	48,076.57	6,866.84	174,298.03	810,595.87	25,169,721.98

Table 3 - Summary of Available Capacity in Permitted Disposal Facilities – 2003 (in Tons)

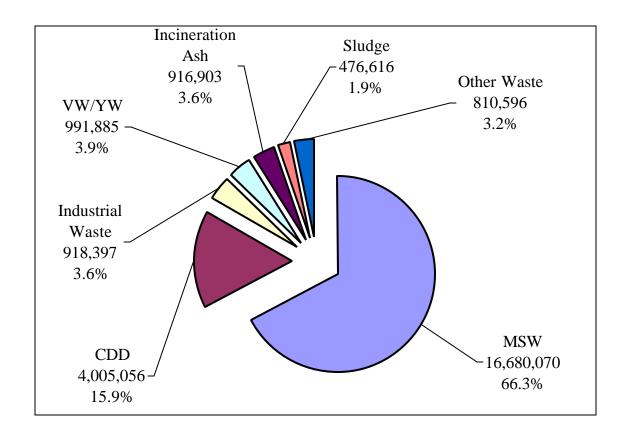
Facility Type	Reported Available	Reported Annual	Remaining
	Capacity on 12/31/03	Disposal Rate 2003	Permitted
			Capacity (Years)
Sanitary (MSW) Landfills	253,876,486	13,898,282	18.3
C/D/D Landfills	18,054,541	2,455,035	7.4
Non-Captive Industrial Landfills	14,254,442	316,550	45.0
Totals:	286,185,469	16,669,868	17.2

Figure 1 - Methods of Solid Waste Management – 2003 (in Tons)



The amount of solid waste "Sent Off Site" is not included in this figure's percentages. The basis for determining these percentages is the sum for all other methods of waste management (recycled, composted, landfilled, etc.) in Table 1, i.e., 20,186,098 tons. Most recycling occurs at facilities other than permitted waste management facilities. As a result, more accurate recycling information is reported by localities. Based on the local government recycling reports, the statewide average recycling rate for calendar year 2002 was 36.75%. See http://www.deq.virginia.gov/recycle/pdf/rrr02rpt%20.pdf. A report on the statewide recycling rate for calendar year 2003 will be issued later this year.

Figure 2 - Composition of the Solid Waste Stream -2003 (in Tons)



Note: This figure does not include waste streams comprising less than 1% of the total waste stream. This includes Tires (0.5%), White Goods (0.2%), Regulated Medical Waste (<0.1%), PCS (<0.1%), and Friable Asbestos (<0.1%).

Figure 3 - Waste Received from Out-of-State Jurisdictions - 2003 (in Tons)

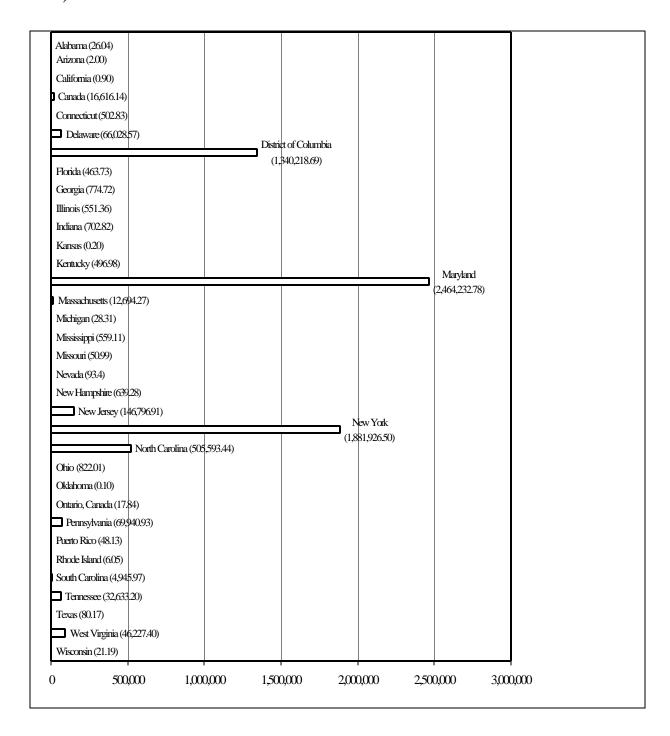


Figure 4 - Quantity of Solid Waste Received in Virginia - 2003 (in Tons)

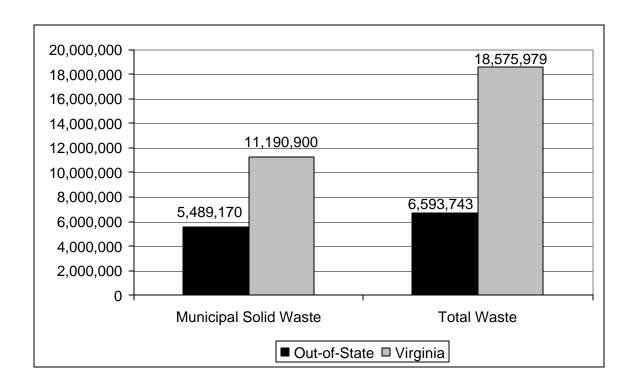


Figure 5 - Comparison of Total Solid Waste Received From 1998 Through 2003

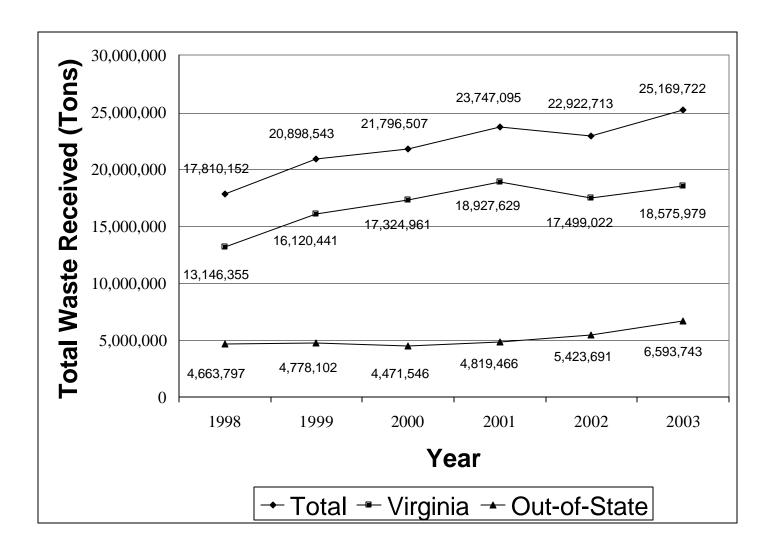
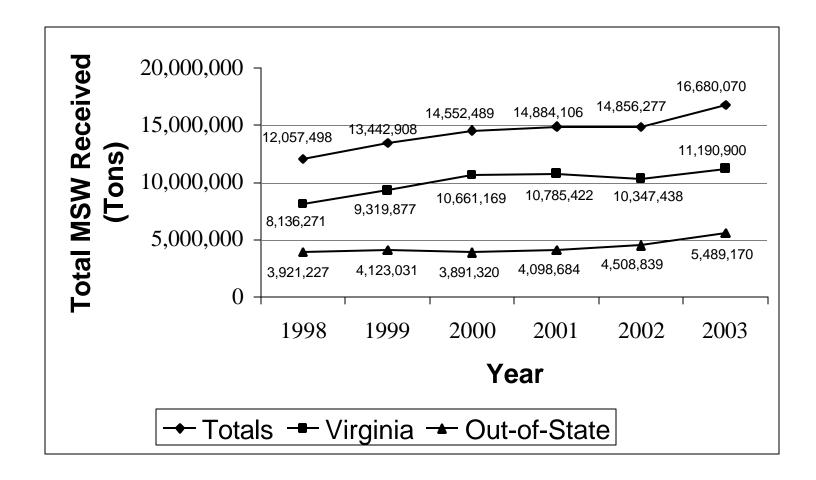


Figure 6 - Comparison of Municipal Solid Waste Received From 1998 Through 2003



Attachment 1 - Virginia Code § 10.1-1413.1 - Waste information and assessment program

A. The Department shall report by June 30 of each year the amount of solid waste, by weight or volume, disposed of in the Commonwealth during the preceding calendar year. The report shall identify solid waste by the following categories: (i) municipal solid waste; (ii) construction and demolition debris; (iii) incinerator ash; (iv) sludge other than sludge that is land applied in accordance with § 32.1-164.5; and (v) tires. For each such category the report shall include an estimate of the amount that was generated outside of the Commonwealth and the jurisdictions where such waste originated, if known. The report shall also estimate the amount of solid waste managed or disposed of by each of the following methods: (i) recycling; (ii) composting; (iii) landfilling; and (iv) incineration.

B. All permitted facilities that treat, store or dispose of solid waste shall provide the Department not more than annually, upon request, with such information in their possession as is reasonably necessary to prepare the report required by this section. At the option of the facility owner, the data collected may include an accounting of the facility's economic benefits to the locality where the facility is located including the value of disposal and recycling facilities provided to the locality at no cost or reduced cost, direct employment associated with the facility, and other economic benefits resulting from the facility during the preceding calendar year. No facility shall be required pursuant to this section to provide information that is a trade secret as defined in § 59.1-336.

C. This section shall not apply to captive waste management facilities.

Attachment 2 - 9 Virginia Administrative Code 20-80-115 - Solid waste information and assessment program

A. The owners or operators of all permitted solid waste management facilities that treat, store, or dispose of solid waste shall report by March 31 of each year the amount of solid waste, by weight or volume, received and managed by the facility during the preceding calendar year. The report shall identify solid waste by the following categories: (i) municipal solid waste; (ii) construction and demolition debris; (iii) industrial waste; (iv) regulated medical waste; (v) vegetative and yard waste; (vi) incinerator ash; (vii) sludge other than sludge that is land applied in accordance with § 32.1-164.5 of the Code of Virginia; (viii) tires; (ix) white goods; (x) friable asbestos; (xi) petroleum contaminated soil; and (xii) other special waste. For each such category the report shall include an estimate of the amount that was generated outside of the Commonwealth and the state or local jurisdictions where such waste originated. The report shall also estimate the amount of solid waste managed or disposed of by each of the following methods: (a) recycling; (b) composting; (c) landfilling; (d) incineration (e) sending off-site for further management; and (f) stored on site on December 31 of the reporting year.

Information on the available capacity and expected life of the facilities, at the disposal rates submitted in this subsection, shall be included in the annual report required by this section.

- B. At the option of the facility owner, the data collected may include an accounting of the facility's economic benefits to the locality where the facility is located including the value of disposal and recycling facilities provided to the locality at no cost or reduced cost, direct employment associated with the facility, and other economic benefits resulting from the facility during the preceding calendar year.
- C. No facility shall be required pursuant to this section to provide information that is a trade secret as defined in § 59.1- 336 of the Code of Virginia.
- D. The reporting form to be used to fulfill the reporting requirement of this part is Form DEQ 50-25 (Solid Waste Information and Assessment Program Reporting Table), which is also available in the Regulations for the Development of Solid Waste Management Plans (9 VAC 20-130).
- E. This section shall not apply to captive waste management facilities including captive industrial landfills.

Attachment 3 - 9 Virginia Administrative Code 20-130-165 - Waste information and assessment program

A. The owners or operators of all permitted facilities that treat, store, or dispose of solid waste shall report by March 31 of each year the amount of solid waste, by weight or volume, received and managed in the Commonwealth during the preceding calendar year. The report shall identify solid waste by the following categories: (i) municipal solid waste; (ii) construction and demolition debris; (iii) industrial waste; (iv) regulated medical waste; (v) vegetative and yard waste; (vi) incinerator ash; (vii) sludge other than sludge that is land applied in accordance with § 32.1-164.5 of the Code of Virginia; (viii) tires; (ix) white goods; (x) friable asbestos; (xi) petroleum contaminated soil; and (xii) other special waste. For each such category the report shall include an estimate of the amount that was generated outside of the Commonwealth and the jurisdictions where such waste originated.

The report shall also estimate the amount of solid waste managed or disposed of by each of the following methods: (i) recycling; (ii) composting; (iii) landfilling; (iv) incineration (v) sending off site for further management; and (vi) stored on site on December 31 of the reporting year. This section shall not apply to captive waste management facilities. The report is to be sent to the department regional office for the facility's location.

Information on the available capacity and expected life of the facilities at the disposal rates submitted in this subsection shall be included in the annual report required by this section.

- B. At the option of the facility owner, the data collected may include an accounting of the facility's economic benefits to the locality where the facility is located including the value of disposal and recycling facilities provided to the locality at no cost or reduced cost, direct employment associated with the facility, and other economic benefits resulting from the facility during the preceding calendar year.
- C. No facility shall be required pursuant to this section to provide information that is a trade secret as defined in §59.1-336 of the Code of Virginia.
- D. Every city, county and town in the Commonwealth, or solid waste management planning region approved pursuant to 9 VAC 20-130-180, shall submit to the department by April 30 of each year, the data and calculations required in 9 VAC 20-130-120 B and C.

Attachment 4 - Reporting Table

I. <u>Fo</u>	rm DE	Q 50-25	Solid W	aste Infor	mation and	l Assessm	ent Progra	m- Reporti	ng Table	
Facility Name						_]	Permit No.			
Date Submitted to DEQ Annual Reporting Period:										
Available Permitted Capacity				Total An	nual Dispos	sal Rate		E	Expected Rem	aining Permitted Life
II. Originating Jurisdiction (ie. S	State):				Is Ju	risdiction (Outside Vir	ginia? YE	S	NO
	Uı	nits			Wa	ste Managem	ent- Report Am	nount by Weight	t or Volume	
Waste Type	(check one)		(REPORTING UNITS MUST BE CONSISTENT FOR ALL FIELDS OF A PARTICULAR WASTE TYPE, USE TONS OR CUBIC YARDS. NOT BOTH)							
	Tons	cu.yds	Received	Recycled	Composted	Landfilled	Incinerated	Sent off site	Stored on site	Other:
Municipal Solid Waste										
Construction/ Demolition/Debris										
Industrial Waste										
Regulated Medical Waste										
Vegetative/Yard Waste										
Incineration Ash										
Sludge*										
Tires										
White Goods										
Friable Asbestos										
Petroleum Contaminated Soil										
Other Waste (specify): NOTE: Report each different jurisdict	ion on a s	separate p	oage	*Sludge	other than th	at applied to	the land in a	ccordance with	h' 32.1-164.5	Revised 6/6/00

Attachment 5 - Instructions for Completing Form DEQ 50-25 Solid Waste Information and Assessment Program Reporting Form

Instructions for Completing Form DEQ 50-25 Solid Waste Information and Assessment Program Reporting Form

These instructions are designed to assist facilities with completing the required reporting form DEQ Form 50-25. A copy of each form submitted should be maintained in your facility files.

Section I- This section reports general facility information, reporting timeframes, and facility's disposal capacity/rate/life expectancies.

Facility Name-This is the name of the facility as it appears on the permit issued by the department. **Permit No.**-This is the permit number assigned to the facility by the department. Only one permit number may be listed. For multiple permitted facilities, individual forms must be completed for each permitted facility. If a facility is being operated under permit-by-rule status, the letters PBR must precede the numbers (Ex: PBR999).

Date submitted to DEQ- This is the date the facility sends the reporting form(s) to the department. NOTE: All forms must be completed and sent by March 31 of each year for the waste managed during the preceding calendar year (Example: 3/1/00).

Annual Reporting Period- This is the calendar year for which the data is being submitted (Example: 1/1/00-12/31/00).

Available Permitted Capacity- Only required for landfills, all other facilities enter 'N/A'. Available Permitted Capacity means the space remaining in the landfill that is available for disposal as of December 31 or the reporting year. The capacity must be reported in cubic yards. The capacity is calculated by subtracting the landfill volume already used from the landfill volume specified in the approved Part B permit. Future proposed expansions not included in the approved Part B permit area may not be included in the capacity calculation. This information can also be obtained from the calculations performed to comply with air requirements found in 40 CFR Subpart WWW (40 CFR 60.750-60.759).

Total Annual Disposal Rate- Only required for landfills, all other facilities enter 'N/A'. The Total Annual Disposal Rate is the total amount of waste disposed of at the facility during the annual reporting period. This must be reported in cubic yards. To convert from tons to cubic yards, divide the amount in tons by 0.5 to derive the amount in cubic yards.

Expected Remaining Permitted Life- Only required for landfills, all other facilities enter 'N/A'. The Expected Remaining Life is calculated by dividing the Available Permitted Capacity by the Total Annual Disposal Rate. This information must be reported in years.

Section II- This section reports the origin of, types, and amounts of waste managed. Information must be provided concerning the originating jurisdiction of waste received. Amounts of waste can be entered in either tons or cubic yards as determined by the facility. For amounts reported in cubic yards, DEQ will use simple conversion factors to obtain estimated weights.

Originating Jurisdiction (i.e. State)- Identify the jurisdiction (state/district/territory) from which the waste originated. For waste received from within Virginia, only one form must be completed. For waste received from outside Virginia, a separate form must be completed for each individual jurisdiction from which waste was received. A jurisdiction is either a state, territory, or country. (Example: If you receive waste from the state of New York, and/or New York City, the jurisdiction is "New York." Wastes received from Washington, D.C. and Puerto Rico, are all individual jurisdictions.)

Is Jurisdiction Outside Virginia- Mark either 'YES' or 'No' as it relates to the originating jurisdiction.

**Waste Types- Definitions found below are provided to assist facilities with completing Form DEQ 50-25. Specific definitions can be found in the Virginia Solid Waste Management Regulations (9 VAC 20-80-10, *et seq.*) and the Regulated Medical Waste Regulations (9 VAC 20-120-10 *et seq.*).

Municipal Solid Waste- means that waste which is normally composted of residential, commercial, and institutional solid waste and residues derived from combustion of these wastes. *NOTE*: Paper and cardboard should be recorded in the row labeled "Municipal Solid Waste".

Construction/Demolition/Debris- This category includes construction waste, demolition waste, and debris waste. These wastes must be recorded cumulatively in this row. Construction waste- means solid waste which is produced or generated during construction, remodeling, or repair of pavements, houses, commercial buildings, and other structures. Construction wastes include, but are not limited to lumber, wire, sheetrock, broken brick, shingles, glass, pipes, concrete, paving materials, and metal and plastics if the metal or plastics are a part of the materials of construction or empty containers for such materials. Paints, coatings, solvents, asbestos, any liquid compressed gases or semi-liquids and garbage are not construction wastes. Demolition waste- means that solid waste which is produced by the destruction or structures and their foundations and includes the same materials as construction wastes. Debris waste means wastes resulting from land clearing operations. Debris wastes include, but are not limited to stumps, wood, brush, leaves, soil, and road spoils. NOTE: Concrete and asphalt should be recorded in the row labeled "Construction/Demolition/Debris".

Industrial Waste - means any solid waste generated by manufacturing or industrial process that is not a regulated hazardous waste. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: Electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas wastes.

Regulated Medical Waste - means solid wastes so defined by the Regulated Medical Waste Management Regulations (9 VAC 20-120-10 et seq.) as promulgated by the Virginia Waste Management Board. Vegetative/Yard Waste - This category includes vegetative waste and yard waste. These wastes must be recorded cumulatively in this row. Vegetative waste - means decomposable materials generated by yard and lawn care or land clearing activities and includes, but is not limited to, leaves, grass trimmings, woody wastes such as shrub and tree prunings, bark, limbs, roots, and stumps. For more detail see 9 VAC 20-101-10 et seq. Yard waste - means that fraction of municipal solid waste that consists of grass clippings, leaves, brush, and tree prunings arising from general landscape maintenance. NOTE: Brush should be recorded in the row labeled Vegetative/Yard Waste category. Incineration Ash-means fly ash or bottom ash residual waste material produced from incineration or burning of solid waste.

Sludge- means any solid, semi-solid or liquid waste generated from a municipal, commercial or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of treated effluent from a wastewater treatment plant. For the purposes of this form, the waste type "Sludge"

Tires- means a tire that has been discarded because it is no longer suitable for its original intended purpose because of wear, damage, or defect. (See 9 VAC 20-150- et seq. For other definitions dealing with the waste tire program.)

White Goods- means any stove, washers, hot water heaters, and other large appliances. Friable Asbestos-means any waste material containing more than 1% asbestos as determined using the polarized light

excludes sludge land applied in accordance with §32.1-164.

microscopy methods specified in 40 CFR Part 763, Subpart F, Appendix A, Section 1, that, when dry, is capable of being crumbled, pulverized or reduced to powder by hand pressure.

Petroleum Contaminated Soil- means a soil that, as a result of a release or human usage, has absorbed or adsorbed only petroleum or petroleum by-products at concentrations above those consistent with nearby undisturbed soil or natural earth materials. Petroleum and petroleum by-products include, but are limited to diesel fuels, kerosene, gasoline, hydraulic fluids, jet engine fuel, and motor oil.

Other Waste (specify)- means any wastes that do not meet the previously defined waste types. A brief description of the waste must be provided in the field 'Other Waste (specify)'. Examples: Dirt and Soil, Inert waste, Rubber, Wood chips, Supplemental waste, etc.

**Waste Management- Different types of facilities manage waste in different ways. The reporting table contains rows to identify the types of wastes managed. Columns are used to identify how the waste types were managed. In most cases, the amount of waste received should equal the sum of the amounts managed by the listed methods (recycled, composted, landfilled, incinerated, sent-off-site). The following identifies the proper way to report how wastes were managed at your facility.

Received- All waste that was received by the facility during the Annual Reporting Permit must be reported in this column.

Recycled- Waste material that was removed from the incoming waste stream and processed into a raw material for a product must be reported on this column. Only consider items that are truly recycled, not reused. Recycled means "the process of separating a given waste material from the waste stream and processing it so that it may be used again as a raw material for a product, which may or may not be similar to the original product. Recycling shall not include processes that only involve size reduction." NOTE: Only report material that was both separated *AND* processed into a raw material at the facility. If the waste material was not separated *AND* processed, it may not be recorded as 'recycled'. (Example: Newspaper segregated from the waste stream and sent off site to a processing facility for recycling should not be counted as recycled, by the reporting facility.)

Composted- Waste that was stabilized on site through a controlled aerobic decomposition process must be reported in this column. Not all waste types can be composted. Regulated medical waste, incineration ash, tires, white goods, asbestos, and petroleum-contaminated soil can not be managed through composting. For compost facilities, only the volume that could not be composted and was sent off site for disposal should be recorded as 'sent off-site'. Composted/mulched material is considered a product, not a waste, and does not have to be reported on this form.

Landfilled- Waste that was landfilled on-site must be reported in this column. Waste received at a facility that was later sent off site for management through landfilling must not be reported in this column. Instead it must be reported in the sent off-site column. Ex: Waste received at a transfer station that was later sent off site to a landfill must be reported as 'sent off site'.

Incinerated- Waste that was incinerated on-site must be reported in this column. Waste received at the facility that was later sent off site for incineration may not be reported in this column. Instead it must be reported in the sent off site column. NOTE: 'Open Burning' is not the same as 'Incineration'. Ex: Waste received at a transfer station that was sent off site to an incinerator must be reported as 'sent off site', not incinerated.

Sent off site- Waste that was not treated, stored, or disposed of at the receiving facility but was instead sent off site to another facility for management must be reported in this column. Ex: Ash generated from an incinerator process, and temporarily stored on site prior to being sent off site for disposal must be listed in this column.

Stored on site- Waste that was remaining on site at the end of the calendar year must be recorded in this column. This does not include wastes that will remain on site permanently, but includes wastes that are stored temporarily at the facility. The total amount of waste landfilled at a facility must not be listed in

this column, instead it must be listed in the 'landfilled' column. Ex's: White Goods awaiting pickup by off-site metal recycler; Regulated Medical Waste in storage awaiting treatment.

Other management- Wastes managed by methods other than those specified in the previous columns must be recorded in this column. This column must include a description of how the waste type was managed along with the amount of waste managed.

Attachment 6 - List of Facilities Reporting - 2003

Facility Name	Permit No.	Regional Office
623 LANDFILL INC.	PBR009	PRO
623 LANDFILL, INC.	SWP506	PRO
ACCOMACK COUNTY NORTH LANDFILL	SWP461	TRO
ACCOMACK COUNTY NORTH LANDFILL BALER FACILITY	PBR112	TRO
ACCOMACK COUNTY SOUTH LANDFILL	SWP091	TRO
ACCOMACK COUNTY SOUTH LANDFILL BALER FACILITY	PBR090	TRO
AFETA CAMP PEARY	PBR097	TRO
ALLEGHANY COUNTY (ISLAND FORD TRANSFER STATION)		WCRO
AMELIA LANDFILL	SWP540	PRO
AMERICAN WASTE INDUSTRIES	PBR114	TRO
AMERICAN WASTE INDUSTRIES	PBR187	PRO
AMERICAN WASTE INDUSTRIES	SWP871-I	TRO
AMHERST COUNTY LANDFILL	SWP563	SCRO
APPOMATTOX COUNTY LANDFILL	PBR163	SCRO
APPOMATTOX COUNTY LANDFILL	SWP086	SCRO
AQUA CLEAN ENVIRONMENTAL OF VIRGINIA, LLC	PBR052	PRO
AQUA CLEAN ENVIRONMENTAL OF VIRGINIA, LLC.	SWP592	PRO
ASHCAKE ROAD LANDFILL	SWP574	PRO
ATLANTIC WASTE DISPOSAL LANDFILL	SWP562	PRO
AUGUSTA REGIONAL LANDFILL	SWP585	VRO
BATTLE CREEK LANDFILL	SWP579	VRO
BEDFORD COUNTY SANITARY LANDFILL	SWP560	WCRO
BEDFORD COUNTY TRANSFER STATION	PBR031	WCRO
BERKLEY	SWP100	NVRO
BATH COUNTY TRANSFER STATION	PBR045	VRO
BETHEL LANDFILL	SWP580	TRO
BFI FREDERICKSBURG RECYCLERY	PBR107	NVRO
BFI ROANOKE VALLEY MATERIALS RECOVERY FACILITY	PBR105	WCRO
BLUE RIDGE DISPOSAL, INC.	PBR104	WCRO
BOISSEVAIN TRANSFER STATION	PBR004	SWRO
BOTETOURT COUNTY LANDFILL	SWP582	WCRO
BRUNSWICK WASTE MANAGEMENT FACILITY, LLC.	SWP583	PRO
BUCHANAN COUNTY TRANSFER STATION	PBR106	SCRO
CAMPBELL COUNTY	SWP285	SCRO
CARL GARNER/ GARNER TIRE	PBR127	WCRO
CAROLINE COUNTY LANDFILL	SWP182	NVRO
CARROLL-GRAYSON-GALAX SW AUTHORITY	SWP508	SWRO
CEDAR BLUFF TRANSFER STATION	PBR002	SWRO
CENTRAL INTELLIGENCE AGENCY - GEORGE BUSH CENTER OF INTELLIG	PBR173	NVRO
CHARLES CITY LANDFILL	SWP531	PRO
CITY OF BEDFORD (HYLTON SITE)	SWP569	WCRO
CITY OF BRISTOL INCINERATION FACILITY	PBR074	SWRO
CITY OF BRISTOL MATERIALS RECOVERY FOR SCRAP TIRES	PBR116	SWRO
CITY OF BRISTOL SANITARY LANDFILL	SWP498	SWRO

Facility Name	Permit No.	Regional Office
CITY OF BRISTOL VIRGINIA QUARRY BALEFILL	SWP588	SWRO
CITY OF DANVILLE COMPOST FACILITY	PBR010	SCRO
CITY OF HARRISONBURG	SWP390	VRO
CITY OF SALEM TRANSFER STATION	PBR028	WCRO
CON-SERV INDUSTRIES	PBR102	NVRO
COUNTRY SOUTH LLC.	SWP581	WCRO
COVANTA ALEXANDRIA ARLINGTON, INC.	SWP435	NVRO
COVANTA FAIRFAX, INC.	SWP510	NVRO
COX'S CHARLES CITY ROAD LANDFILL	SWP235	PRO
COX'S DARBYTOWN ROAD LANDFILL	SWP525	PRO
COX'S TAYLOR ROAD LANDFILL	SWP270	PRO
CRANEY ISLAND BIOCELL	PBR061	NVRO
CRANEY ISLAND LANDFILL	SWP041	TRO
CULPEPER COUNTY TRANSFER STATION	PBR140	PRO
DEPT. OF HUMAN SERVICES LABORATORY	PBR206	NVRO
DICKENSON COUNTY TRANSFER STATION	PBR049	SWRO
DINWIDDIE COUNTY TRANSFER STATION	PBR137	PRO
ELBOW ENTERPRISES INC	SWP305	TRO
ENVIRONMENTAL OPTIONS INC	PBR153	WCRO
ESSEX TRANSFER STATION	PBR016	PRO
FAIRFAX COUNTY HEALTH DEPT.	PBR246	NVRO
FAUQUIER COUNTY LANDFILL	SWP149	NVRO
FAUQUIER COUNTY LANDFILL	SWP575	NVRO
FIRST PIEDMONT CORPORATION - LANDFILL	SWP065	SCRO
FIRST PIEDMONT CORPORATION - TRANSFER	PBR196	SCRO
FLOYD COUNTY TRANSFER STATION	PBR050	WCRO
FLUVANNA COUNTY LANDFILL	SWP429	VRO
FLUVANNA TRANSFER	PBR099	VRO
FRANKLIN COUNTY LANDFILL	SWP072	WCRO
FREDERICK COUNTY LANDFILL	SWP591	VRO
FREDERICK COUNTY SANITARY LANDFILL	SWP529	VRO
GREENE COUNTY SOLID WASTE FACILITY	SWP568	VRO
GREENSVILLE COUNTY LANDFILL	SWP405	PRO
HAMPTON/NASA STEAM PLANT	SWP297	TRO
HANOVER COUNTY TRANSFER STATION	PBR189	PRO
HENRICO COUNTY - SPRINGFIELD ROAD LANDFILL	SWP545	PRO
HIGGERSON BUCHANAN, INC.	SWP493	TRO
HILLTOP LANDFILL	SWP326	NVRO
I-66 TRANSFER STATION	SWP387	NVRO
I-95 LANDFILL	SWP103	NVRO
INDIAN TRAIL DISPOSAL - MATERIAL RECOVERY	PBR166	TRO
INDIAN TRIAL DISPOSAL FACILITY	SWP451	TRO
INDUSTRIAL RESOURCE TECHNOLOGIES	PBR115	PRO
INOVA FAIRFAX HOSPITAL	PBR170	SCRO
IVY SANITARY LANDFILL	SWP125	VRO
IVY TRANSFER STATION LAMES CITY COUNTY TRANSFER STATION	PBR132	VRO
JAMES CITY COUNTY TRANSFER STATION	PBR021	TRO
JOHN C. HOLLAND ENTERPRISES INC	SWP280	TRO
JOINT PUB SERVICE AUTH OF WYTHE AND BLAND COUNT KING AND QUEEN LANDFILL	SWP554	SWRO PRO
MINO WIN GOEFII PUINLIFF	D WI JJ4	1 KO

Facility Name	Permit No.	Regional Office
KING GEORGE LANDFILL AND RECYCLING	SWP586	NVRO
KING WILLIAM TRANSFER STATION	PBR017	PRO
LCM CORPORATION TRANSFER STATION	PBR136	WCRO
LEE COUNTY TRANSFER STATION	PBR070	WCRO
LITTLE CREEK BLDG 113 MRF	PBR199	TRO
LORTON LANDFILL	SWP331	NVRO
LOUDOUN COMPOSTING	PBR141	NVRO
LOUDOUN COUNTY SOLID WASTE MANAGEMENT	SWP001	NVRO
FACILITY	5 11 001	11110
LOUISA COUNTY SANITARY LANDFILL	SWP194	NVRO
LUNENBURG COUNTY SANITARY LANDFILL	SWP544	SCRO
LYNCHBURG'S SANITARY LANDFILL	SWP558	SCRO
MADISON COUNTY TRANSFER STATION	PBR154	NVRO
MANASSAS TRANSFER STATION (MANASSAS,VA)	PBR091	NVRO
MARTINSVILLE SANITARY LANDFILL	SWP049	WCRO
MATTHEWS TRANSFER STATION	PBR018	PRO
MECKLENBURG COUNTY LANDFILL	PBR011	SCRO
MECKLENBURG COUNTY LANDFILL	SWP014	SCRO
MERILLAT	PBR161	SWRO
MERRIFIELD MATERIAL RECOVERY FACILITY (FAIRFAX	PBR111	NVRO
VA)	IDKIII	TVICO
METALPRO INC	PBR152	NVRO
MICROBIOTEST INC.	PBR505	NVRO
MIDDLE PENINSULA LANDFILL AND RECYCLING FACILITY		PRO
MIDDLE PENINSULA LANDFILL AND RECYCLING FACILITY		PRO
MIDDLESEX TRANSFER STATION	PBR019	PRO
MONTGOMERY REGIONAL SOLID WASTE AUTHORITY	PBR149	WCRO
MONTOGOMERY REGIONAL SOLID WASTE AUTHORITY	PBR169	WCRO
MXI ENVIRONMENTAL SERVICES LLC	PBR180	SWRO
NELSON COUNTY TRANSFER STATION	PBR051	VRO
NEW RIVER SOLID WASTE MANAGEMENT AREA	SWP548	WCRO
NEWPORT NEWS COMPOSTING FACILITY	PBR096	TRO
NEWPORT NEWS COMPOSTING FACILITY NO.2	PBR110	TRO
NORFOLK NAVAL SHIPYARD	PBR135	TRO
NORTHAMPTON COUNTY SANITARY LANDFILL	SWP507	TRO
NOTTOWAY COUNTY SANITARY LANDFILL	SWP304	SCRO
OLD DOMINION LANDFILL	SWP553	PRO
OLD DOMINION MATERIAL RECOVERY FACILITY	PBR006	PRO
ORANGE COUNTY SANITARY LANDFILL	SWP090	NVRO
PATRICK COUNTY SOLID WASTE TRANSFER STATION	PBR032	NVRO
PETERS MOUNTAIN LANDFILL	SWP594	WCRO
PETERSBURG SANITARY LANDFILL	SWP228	PRO
PITTSYLVANIA COUNTY LANDFILL	SWP571	SCRO
POTOMAC LANDFILL	SWP441	NVRO
POTOMAC LANDFILL INC MRF (AWRF)	PBR101	NVRO
POWHATAN CORRECTIONAL FACILITY	PBR175	PRO
PRINCE EDWARD COUNTY SANITARY LANDFILL	SWP584	SCRO
PRINCE WILLIAM COUNTY LANDFILL	SWP029	NVRO
PRINCE WILLIAM COUNTY YARD WASTE COMPOSTING	PBR030	NVRO
FACILITY	DIOSO	11110

Facility Name	Permit No.	Regional Office
PURGO, INC.	PBR046	PRO
QUALLA ROAD LANDFILL	SWP516	PRO
RAINWATER LANDFILL	SWP327	NVRO
RAPPAHANNOCK COUNTY SANITARY LANDFILL	SWP520	NVRO
RAPPAHANNOCK REGIONAL SOLID WASTE MANAGEMENT		NVRO
BOARD	5 ((130)	11110
RECLAMATION INC	PBR062	TRO
RECOVERY TECHNOLOGIES GROUP OF VIRGINIA INC	PBR502	SCRO
RICHMOND TRANSFER STATION	PBR160	PRO
ROANOKE VALLEY RESOURCE AUTHORITY - SMITH GAP	SWP555	WCRO
LANDFILL		
ROANOKE VALLEY RESOURCE AUTHORITY-TINKER CREEK	SWP546	WCRO
TRANSFER STATION		
ROCKBRIDGE COUNTY BALING FACILITY	PBR071	VRO
ROCKBRIDGE COUNTY LANDFILL	SWP075	VRO
ROCKINGHAM COUNTY	SWP062	VRO
RUSSELL COUNTY TRANSFER STATION	PBR001	SWRO
SAFETY-KLEEN SYSTEMS, INC (315401)	PBR079	PRO
SCOTT COUNTY LANDFILL	SWP023	SWRO
SHENANDOAH COUNTY LANDFILL	SWP469	VRO
SHOOSMITH SANITARY LANDFILL	SWP587	PRO
SIMMONS DARBYTOWN ROAD LANDFILL	SWP524	PRO
SMYTH COUNTY TRANSFER STATION	PBR041	SWRO
SOILEX CORPORATION	PBR075	TRO
SOILEX CORPORATION	PBR155	TRO
SOLID WASTE TRANSFER STATION - CITY OF BRISTOL VA	PBR121	SWRO
SOUTH BOSTON LANDFILL	SWP031	SCRO
SPOTSYLVANIA COUNTY - LIVINGSTON LANDFILL #2	SWP547	NVRO
SPSA BOYKINS TRANSFER STATION	SWP484	TRO
SPSA CHESAPEAKE TRANSFER STATION	PBR194	TRO
SPSA FRANKLIN TRANSFER STATION	PBR192	TRO
SPSA ISLE OF WIGHT TRANSFER STATION	PBR193	TRO
SPSA IVOR TRANSFER STATION	SWP539	TRO
SPSA LANDSTOWN TRANSFER STATION	PBR191	TRO
SPSA NORFOLK TRANSFER STATION	PBR195	TRO
SPSA OCEANA TRANSFER STATION	PBR190	TRO
SPSA POWER PLANT	SWP482	TRO
SPSA RDF PLANT	SWP455	TRO
SPSA REGIONAL LANDFILL	SWP417	TRO
SPSA TIRE PROCESSING FACILITY	PBR072	TRO
SPSA YARD WASTE FACILITY (VIRIGINIA BEACH)	PBR024	TRO
STERLING MATERIALS RECOVERY FACILITY	PBR093	NVRO
SUFFOLK COMPOSTING FACILITY	PBR133	TRO
T& L DISPOSAL INC	SWP322	TRO
TAZEWELL COUNTY LANDFILL	SWP564	SWRO
THOMAS BROS. DEBRIS LANDFILL	SWP445	WCRO
TIDEWATER TRANSCYCLERY	PBR077	TRO
TIRE RECYCLERS, INC	PBR142	PRO
US ARMY GARRISON FT BELVOIR, DEWITT ARMY	PBR164	NVRO
HOSPITAL		

Facility Name	Permit No.	Regional Office
VCU HEALTH SYSTEM (MCVH)	PBR174	PRO
VIRGINIA BEACH LANDFILL (MT. TRASHMORE)	SWP398	TRO
VIRGINIA HEALTH CARE WASTE MANAGEMENT	PBR143	WCRO
COOPERATIVE		
VIRGINIA HOSP CENTER	PBR178	NVRO
VIRGINIA MATERIALS INC	PBR117	SCRO
VIRGINIA RECYCLING	PBR039	PRO
VPPSA YARDWASTE COMPOSTING FACILITY	PBR013	TRO
WARREN COUNTY TRANSFER STATION	PBR033	VRO
WASHINGTON COUNTY VA SOLID WASTE TRANSFER	PBR003	SWRO
STATION		
WASTE MGT. INC. (DANVILLE T.S.)	PBR015	TRO
WATKINS NURSERIES COMPOST DIVISION	PBR181	PRO
WAYNESBORO MUNICIPAL LANDFILL	SWP204	VRO
WESTMORELAND	PBR069	PRO
WISE COUNTY BULL HILL TRANSFER STATION	PBR029	SWRO
WISE COUNTY LANDFILL	SWP513	SWRO
WOLFTRAP PROPERTIES, LTD.	SWP436	TRO
YARD WASTE COMPOSTING FACILITY - CITY OF BRISTOL	PBR156	SWRO
VIRIGINIA		
YORK COUNTY TRANSFER STATION	PBR022	TRO

Total Count = 205

*Regional Offices

NVRO - Northern Virginia PRO - Piedmont TRO - Tidewater VRO - Valley SCRO - South Central SWRO - Southwest

WCRO - West Central

Attachment 7 - Capacity/Disposal Rate Detail for Virginia Landfills - 2003 (in Tons)

Facility Name	Permit Number	Landfill Type	12/03 Cap. in Tons ⁹	Landfilled in 03				
Sanitary Landfills								
ACCOMACK COUNTY NORTH LANDFILL	SWP461	Sanitary Landfill	274,973.50	24,314.00				
ACCOMACK COUNTY SOUTH LANDFILL	SWP091	Sanitary Landfill	207,241.00	21,437.00				
AMELIA LANDFILL	SWP540	Sanitary Landfill	19,544,105.00	363,446.43				
AMHERST COUNTY LANDFILL	SWP563	Sanitary Landfill	632,995.00	27,833.10				
APPOMATTOX COUNTY LANDFILL	SWP086	Sanitary Landfill	21,991.00	11,627.00				
ATLANTIC WASTE DISPOSAL LANDFILL	SWP562	Sanitary Landfill	50,881,819.00	2,235,879.00				
AUGUSTA REGIONAL LANDFILL	SWP585	Sanitary Landfill	547,277.50	115,870.18				
BATTLE CREEK LANDFILL	SWP579	Sanitary Landfill	2,877,050.00	368,018.93				
BEDFORD COUNTY SANITARY LANDFILL	SWP560	Sanitary Landfill	185,427.50	42,225.00				
BETHEL LANDFILL	SWP580	Sanitary Landfill	27,953,000.00	574,385.65				
BOTETOURT COUNTY LANDFILL	SWP582	Sanitary Landfill	93,825.00	23,079.26				
BRUNSWICK WASTE MANAGEMENT	SWP583	Sanitary Landfill	14,416,854.00	1,196,600.00				
FACILITY, LLC.								
CAMPBELL COUNTY	SWP285	Sanitary Landfill	1,883,842.50	34,126.68				
CAROLINE COUNTY LANDFILL	SWP182	Sanitary Landfill	0.00	0.00				
CARROLL-GRAYSON-GALAX SW	SWP508	Sanitary Landfill	214,505.50	51,555.10				
AUTHORITY	GYY 70 504	G . 7 1011	4 5 20 7 020 70					
CHARLES CITY LANDFILL	SWP531	Sanitary Landfill	16,297,038.50	572,555.70				
CITY OF BEDFORD (HYLTON SITE)	SWP569	Sanitary Landfill	60,000.00	15,003.00				
CITY OF BRISTOL SANITARY LANDFILL	SWP498	Sanitary Landfill	0.00	0.00				
CITY OF BRISTOL VIRGINIA QUARRY	SWP588	Sanitary Landfill	3,230,000.00	184,629.25				
BALEFILL FAUQUIER COUNTY LANDFILL	SWP149	Sanitary Landfill	444,778.00	137,236.00				
FAUQUIER COUNTY LANDFILL	SWP575	Sanitary Landfill	1,189,354.50	92,181.00				
FLUVANNA COUNTY LANDFILL	SWP429	Sanitary Landfill	78,000.00	9,886.00				
FRANKLIN COUNTY LANDFILL	SWP072	Sanitary Landfill	365,819.50	55,704.00				
FREDERICK COUNTY SANITARY LANDFILL	SWP529	Sanitary Landfill	6,635,000.00	143,242.00				
		•		23,117.00				
GREENSVILLE COUNTY LANDFILL HENRICO COUNTY - SPRINGFIELD ROAD	SWP405	Sanitary Landfill Sanitary Landfill	455,715.00 814,500.00					
LANDFILL	SWP545	Sanitary Landilli	814,500.00	105,670.00				
I-95 LANDFILL	SWP103	Sanitary Landfill	2,425,000.00	372,133.16				
IVY SANITARY LANDFILL	SWP125	Sanitary Landfill	0.00					
KING AND QUEEN LANDFILL	SWP554	Sanitary Landfill	15,144,500.00	886,313.11				
KING GEORGE LANDFILL AND RECYCLING	SWP586	Sanitary Landfill	17,221,479.00	1,335,675.11				
LOUDOUN COUNTY SOLID WASTE	SWP001	Sanitary Landfill	11,650,000.00	38,196.00				
MANAGEMENT FACILITY	2 1 001	Zanar j Zanarin	11,050,000.00	50,170.00				
LOUISA COUNTY SANITARY LANDFILL	SWP194	Sanitary Landfill	640,000.00	26,198.37				
LUNENBURG COUNTY SANITARY LANDFILL	SWP544	Sanitary Landfill	96,500.00	10,982.34				
LYNCHBURG'S SANITARY LANDFILL	SWP558	Sanitary Landfill	1,203,434.50	167,583.00				
MARTINSVILLE SANITARY LANDFILL	SWP049	Sanitary Landfill	125,341.50					

 $^{^9}$ Facilities reported available capacity in tons and cubic yards. The available capacity has been estimated using the following conversion factors: 1000 lbs. pounds of MSW = 1 cu. yd.; 1200 lbs. of CDD waste = 1 cu. yd. The available capacity for individual facilities may vary, depending on factors such as the facilities' compaction rate and use of cover materials.

SWP014	Sanitary Landfill	207,500.00	46,622.00
SWP572	Sanitary Landfill	20,270,189.00	421,620.47
SWP548	Sanitary Landfill	459,515.50	192,438.00
SWP507	Sanitary Landfill	8,375.00	13,435.00
	~	100 200 20	
	5	,	22,204.51
	5	, ,	732,757.95
		,	32,411.60
			10,407.55
	-	/	52,975.50
SWP571		1,534,000.00	44,439.00
SWP584		ŕ	32,215.00
SWP029	Sanitary Landfill	5,516,051.00	283,949.00
SWP520	Sanitary Landfill	21,818.50	5,864.00
SWP589	·	,	165,596.00
	·	, ,	140,375.00
		· · · · · · · · · · · · · · · · · · ·	52,433.00
1	1 2		121,201.03
SWP023	5	,	16,436.00
SWP469	Sanitary Landfill	1,900,000.00	37,182.00
SWP587	Sanitary Landfill	6,897,374.00	884,218.00
SWP031	Sanitary Landfill	241,980.16	94,215.02
SWP547	Sanitary Landfill	1,121,000.00	53,839.94
SWP417	Sanitary Landfill	3,050,000.00	843,856.00
SWP564	Sanitary Landfill	1,398,992.50	49,773.67
SWP398	Sanitary Landfill	2,333,367.00	143,603.20
SWP204	Sanitary Landfill	0.00	3,711.72
SWP513	Sanitary Landfill	627,650.00	50,272.79
	Totals:	253,876,486.21	13,898,282.32
= 18.3 years			
10.0 5 642.5			
n-Captive Indu	ustrial Landfills		
SWP065	Industrial Landfill	476,117.30	67,495.65
SWP280	Industrial Landfill	13,778,325.00	249,054.80
g = 2	Totals:	14,254,442.30	316,550.45
city as of 12/03	= 45.0 years		
	SWP572 SWP548 SWP507 SWP304 SWP553 SWP090 SWP594 SWP228 SWP571 SWP584 SWP029 SWP520 SWP589 SWP555 SWP075 SWP062 SWP062 SWP062 SWP031 SWP469 SWP587 SWP031 SWP547 SWP547 SWP544 SWP547 SWP544 SWP587 SWP031 SWP547 SWP564 SWP587 SWP031 SWP588 SWP280 SWP280	SWP572 Sanitary Landfill SWP548 Sanitary Landfill SWP507 Sanitary Landfill SWP304 Sanitary Landfill SWP553 Sanitary Landfill SWP090 Sanitary Landfill SWP594 Sanitary Landfill SWP594 Sanitary Landfill SWP571 Sanitary Landfill SWP584 Sanitary Landfill SWP584 Sanitary Landfill SWP585 Sanitary Landfill SWP550 Sanitary Landfill SWP550 Sanitary Landfill SWP555 Sanitary Landfill SWP555 Sanitary Landfill SWP062 Sanitary Landfill SWP062 Sanitary Landfill SWP063 Sanitary Landfill SWP587 Sanitary Landfill SWP587 Sanitary Landfill SWP547 Sanitary Landfill SWP547 Sanitary Landfill SWP564 Sanitary Landfill SWP564 Sanitary Landfill SWP513 Sanitary Landfill SWP513 Sanitary Landfill SWP513 Sanitary Landfill SWP580 Industrial Landfill	SWP572 Sanitary Landfill 20,270,189.00 SWP548 Sanitary Landfill 459,515.50 SWP507 Sanitary Landfill 8,375.00 SWP508 Sanitary Landfill 498,658.55 SWP553 Sanitary Landfill 2,461,000.00 SWP990 Sanitary Landfill 498,481.00 SWP594 Sanitary Landfill 147,640.00 SWP571 Sanitary Landfill 304,155.50 SWP584 Sanitary Landfill 304,155.50 SWP029 Sanitary Landfill 5,516,051.00 SWP520 Sanitary Landfill 390,000.00 SWP589 Sanitary Landfill 390,000.00 SWP555 Sanitary Landfill 583,500.00 SWP062 Sanitary Landfill 725,000.00 SWP075 Sanitary Landfill 43,261.50 SWP080 Sanitary Landfill 1,900,000.00 SWP081 Sanitary Landfill 1,900,000.00 SWP587 Sanitary Landfill 3,050,000.00 SWP547 Sanitary Landfill 3,050,000.00 <

	CDD I	Landfills			
CRANEY ISLAND LANDFILL	SWP041	CDD Landfill		1,279,970.40	75,267.15
COX'S TAYLOR ROAD LANDFILL	SWP270	CDD Landfill		476,050.20	132,205.80
ELBOW ENTERPRISES INC	SWP305	CDD Landfill		0.00	60,343.20
T& L DISPOSAL INC	SWP322	CDD Landfill		7,200.00	3,928.80
HILLTOP LANDFILL	SWP326	CDD Landfill		720,000.00	146,400.00
RAINWATER LANDFILL	SWP327	CDD Landfill		1,042,366.80	85,062.60
LORTON LANDFILL	SWP331	CDD Landfill		4,800,000.00	1,012,409.88
WOLFTRAP PROPERTIES, LTD.	SWP436	CDD Landfill		90,000.00	71,325.60
POTOMAC LANDFILL	SWP441	CDD Landfill		591,600.00	171,872.00
THOMAS BROS. DEBRIS LANDFILL	SWP445	CDD Landfill		2,400.00	114.00
INDIAN TRIAL DISPOSAL FACILITY	SWP451	CDD Landfill		13,318.80	94,405.46
HIGGERSON BUCHANAN, INC.	SWP493	CDD Landfill		593,516.40	133,639.80
623 LANDFILL, INC.	SWP506	CDD Landfill		4,415,515.80	171,109.85
QUALLA ROAD LANDFILL	SWP516	CDD Landfill		0.00	16,525.20
SIMMONS DARBYTOWN ROAD LANDFILL	SWP524	CDD Landfill		60,000.00	57,159.60
COX'S DARBYTOWN ROAD LANDFILL	SWP525	CDD Landfill		170,422.20	99,624.60
ASHCAKE ROAD LANDFILL	SWP574	CDD Landfill		1,086,882.00	38,944.80
COUNTRY SOUTH LLC.	SWP581	CDD Landfill		65,298.00	42,600.00
FREDERICK COUNTY LANDFILL	SWP591	CDD Landfill		2,640,000.00	42,097.00
No of CDD Landfills Reporting = 19			Totals:	18,054,540.60	2,455,035.34
Remaining CDD Landfill Capacity as of 12/03 =	7.4 years				
Total Number of All Landfills =83			Totals:	286,185,469.10	16,669,868.11
Remaining Permitted Capacity for All Landfills	= 17.2 years				